

**THE EFFECTS OF JOB DEMANDS AND
RESOURCES VARIABLES ON HEALTH STATUS
OF MEDICAL DOCTORS FROM PUBLIC
HOSPITALS IN MALAYSIA: THE ROLE OF JOB
BURNOUT AS A MEDIATOR**

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by

NOR FAREHAN BINTI OMAR

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**KESAN PERMINTAAN PEKERJAAN DAN SUMBER DAYA PEMBOLEH
UBAH MENGENAI STATUS KESIHATAN DOKTOR PERUBATAN DARI
HOSPITAL AWAM DI MALAYSIA: PERANAN KELETIHAN KERJA
SEBAGAI PENGANTARA**

ABSTRAK

Inovasi dalam sistem penjagaan kesihatan Malaysia telah mengubah transformasi perkhidmatan kesihatan, terutama berkaitan dengan peningkatan kesejahteraan tenaga kerja kesihatan. Walaupun terdapat banyak tentangan pelaksanaan, ada bukti bahawa sistem perawatan kesihatan Malaysia sedang mencari cara untuk mengatasi halangan ini. *Job Demands-Resources (JD-R) model* dan teori *Conservation of Resources (COR)*. Oleh itu, kerangka penyelidikan yang lebih holistik dikembangkan untuk mengkaji hubungan antara pemboleh ubah tuntutan pekerjaan (konflik peranan, beban peranan, kekaburan peranan, neurotisme, dan ketidakselesaian emosi) dan pemboleh ubah sumber pekerjaan (sokongan penyeliaan, sokongan rakan sebaya, sokongan bawahan, ekstraversi, dan lokus kawalan dalaman) dan keletihan kerja, serta hubungan tidak langsung antara dua pemboleh ubah utama dan status kesihatan (kesihatan mental dan kesihatan fizikal) melalui keletihan kerja sebagai pengantara. Data dikumpulkan dari 488 doktor perubatan yang bekerja di lapan hospital awam di Semenanjung Malaysia. Data dianalisis menggunakan Pakej Statistik untuk Sains Sosial (SPSS) versi 26 dan *Smart Partial Least Square* versi 3.3.2 yang juga dikenali sebagai *Structural Equation Model (SEM-Smart PLS)*. Hasil dari penemuan tersebut telah mengenal pasti 20 hipotesis diterima daripada 32

hipotesis. Konflik peranan, beban peranan, kekaburan peranan, neurotisme, ketidakselesaian emosi, sokongan penyeliaan, sokongan bawahan, dan ekstraversi adalah peramal penting yang mempengaruhi keletihan kerja di kalangan doktor perubatan yang bekerja di hospital awam Malaysia. Sementara itu, sokongan rakan sebaya dan lokus kawalan dalaman tidak memberi kesan kepada keletihan kerja. Hasilnya juga mengesahkan bahawa keletihan kerja memberi kesan yang besar kepada kesihatan mental dan kesihatan fizikal doktor perubatan. Peranan keletihan kerja sebagai perantaraan disokong. Sumbangan teori dan praktikal hasil penyelidikan telah dibincangkan. Beberapa pihak akan mendapat manfaat kepada Kementerian Kesihatan Malaysia, Majlis Perubatan Malaysia (MMC), pentadbiran awam, pengurusan hospital, dan doktor perubatan itu sendiri. Akhirnya, keterbatasan penyelidikan dijelaskan dan cadangan untuk penyelidikan masa depan dikemukakan.

**THE EFFECTS OF JOB DEMANDS AND RESOURCES VARIABLES ON
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IN MALAYSIA: THE ROLE OF JOB BURNOUT AS A MEDIATOR**

ABSTRACT

Innovation in Malaysia's healthcare system has altered the transformation of health services, particularly in enhancing the well-being of the health workforce. Despite the enormous implementation challenges, there is evidence that Malaysia's health care system is figuring out how to overcome these obstacles. The Job Demands-Resources (JD-R) model and Conservation of Resources (COR) theory underpinned this study's framework. Thus, a more holistic research framework was developed to examine the relationship between job demands variables (role conflict, role overload, role ambiguity, neuroticism, and emotional dissonance) and job resources variables (supervisory support, peer support, subordinate support, extraversion, and internal locus of control), and job burnout, as well as the indirect relationship between the two main variables and health status (mental health and physical health) via job burnout as the mediator. The data were collected from 488 medical doctors working in eight public hospitals within Peninsular Malaysia. The data were analyzed using Statistical Package for Social Science (SPSS) version 26 and Smart Partial Least Square version 3.3.2, a Structural Equation Model (SEM-Smart PLS). The findings identified that 20 hypotheses were accepted from 32 hypotheses. Role conflict, role overload, role ambiguity, neuroticism, emotional dissonance, supervisory support, subordinate support, and extraversion were

significant predictors of job burnout among medical doctors in Malaysian public hospitals. Meanwhile, peer support and internal locus of control did not impact job burnout. The result also confirmed that job burnout significantly impacts medical doctors' mental and physical health. The mediating role of job burnout was supported. Theoretical and practical contributions of the research findings were discussed. Several parties would benefit from the Ministry of Health Malaysia, the Malaysian Medical Council (MMC), public administration, the management of hospitals, and the medical doctors themselves. Finally, the limitations of the research were explained, and suggestions for future research were presented.

CHAPTER 1

INTRODUCTION

1.1 Introduction

The employee is an asset to an organisation. When the employee feels connected and satisfied with the organisation, he or she tends to be more productive, boosting the organization's success. To be satisfied with the organisation, providing a pleasant environment in the workplace is crucial. The organisation is vital in providing the best working environment so employees feel contented, joyful, happy, and healthy. Hence, determining the best pointers for workers' well-being has become the top priority for employing.

Healthcare systems are essential to the well-being of society, organisations, and individuals in every country. Medical doctors are primarily front-line providers who have daily contact with patients and treat them. Their responsibilities include practising medicine to prevent and cure diseases and promoting and rehabilitating community healthcare services. As a result, they face workplace stressors, such as time pressures, work overload, and a persistent loss of social support on the job. These occupational stressors lead to job burnout, which negatively impacts their welfare. This impact will affect their mental health, specifically depression and anxiety, as well as their physical health, specifically somatic complaints, which have a detrimental effect on their job performance.

1.2 Background of Study

Malaysia has improved its economy very rapidly in the developing world since 1970. Malaysia currently has gained 3.8% of health expenditure of gross domestic product (GDP) growth percentage from 1971-2019 (The World Bank, 2020). Rapid urbanization in Malaysia, the second most urbanised region in South-East Asia after Singapore, is driven by economic development. GDP growth has positive consequences for shifting service-oriented employment, such as the health sector (Das & Paul, 2021). The World Bank lists Malaysia as an upper-middle-income nation (MNHA, 2021; Allied Health Sciences, 2020) due to its rapid urbanisation, with predicted that by 2030, 80% of the population in Malaysia residing in cities (Nurgazina, Ullah, Koondhar, & Lu, 2021). The population surpassed 32.74 million as of 2021 (Worldometers, n.d.).

In Malaysia, Malaysia National Health Accounts (MNHA) is a unit within the Ministry of Health (MOH) that is supported by the Prime Minister's Economic Planning Unit (EPU). MNHA's primary purpose is to provide vital data to macro-level health expenditure data users, policy makers, researchers, and stakeholders. As shown in Figure 1.1 and Figure 1.2, according to Malaysia National Health Accounts' data (MNHA, 2021), it was reported that Total Expenditure on Health (TEH) was RM28,979 million or 3.7 per cent of Gross Domestic Product (GDP) in 2006 and RM67,022 million or 4.7 per cent of GDP in 2020. Overall, the per capita spending on health per individual ranged from RM1,080 in 2006 to RM2,057 in 2020.

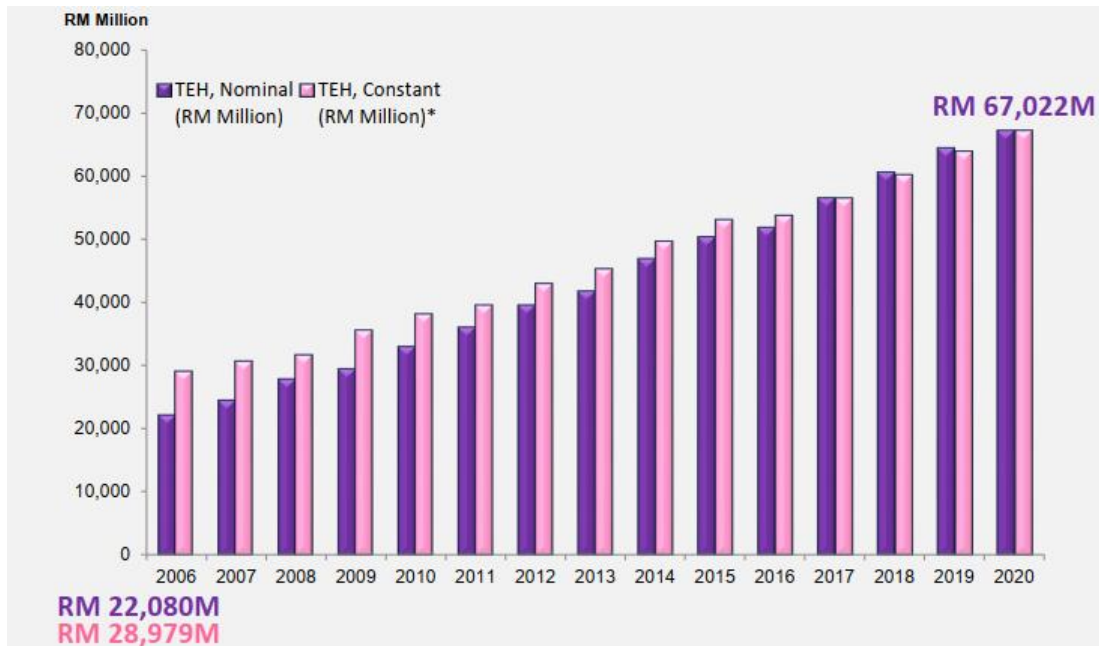


Figure 1.1 Trend for Total Health Expenditure (TEH), 2006-2020

Source: Mesyuarat Jawatankuasa PEMANDU MNHA (MNHA, 2021)

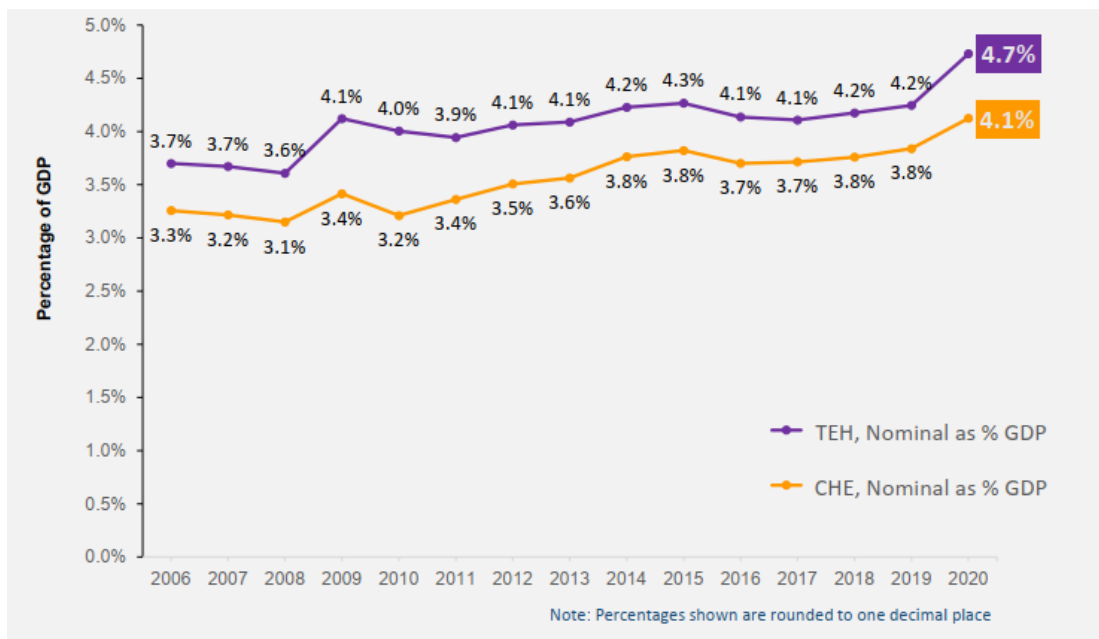


Figure 1.2 Trend for Total Health Expenditure as a percentage of GDP, 2006-2020

Source: Mesyuarat Jawatankuasa PEMANDU MNHA (MNHA, 2021)

In terms of financing, as presented in Table 1.1, the Ministry of Health (MOH) had the highest expenditure amounting to RM28,860 million, making enormous spending in the public sector (MNHA, 2021). The public sector time-series expenditure data explain a similar trend from 1997 to 2019, with MOH's increase in spending from RM3,616 million in 1997 to RM28,860 million in 2019.

Table 1.1
Total Health Expenditure by Public Sector, 2019

MNHA Code	Sources of Financing	RM Million	Percent
MS1.1.1.1	Ministry of Health (MOH)	28,860	85.56
MS1.1.1.9	Other federal agencies (including statutory bodies)	1,862	5.52
MS1.1.1.2	Ministry of Education (MOE)	1,579	4.68
MS1.1.2.2	Other state agencies (including statutory bodies)	453	1.34
MS1.2.2	Social Security Organization (SOCSSO)	394	1.17
MS1.1.3	Local authorities (LA)	212	0.63
MS1.1.2.1	(General) State government	139	0.41
MS1.1.1.3	Ministry of Defence (MOD)	150	0.44
MS1.2.1	Employees Provident Fund (EPF)	83	0.24
Total		33,731	100.00

Source: MNHA Health Expenditure Report 1997-2019 (MNHA, 2021)

As shown in Table 1.2, hospitals spent the most of any Malaysian health service provider in 2019, totalling RM20,263 million or 60.07 per cent. Following that, providers of ambulatory care received RM6,116 million (18%), general health administration and insurance received RM4,006 million (11%), and lastly, providers and administrators of public health programmes received RM1,674 million (4.9%). The remaining providers received RM1,671 million (4.97%), respectively. However, over the last 19 years (2000-2019), spending by three categories of providers, among the highest spenders, increased more rapidly than spending by other providers. These

three categories of providers include hospitals, ambulatory health care providers, and health administration and insurance in general.

Table 1.2

Public Sector Expenditure by Providers of Health Services, 2019

MNHA Code	Providers of Health Care	RM Million	Percent
MP1	All hospitals	20,263	60.07
MP3	Providers of ambulatory health care	6,116	18.13
MP6	General health administration and insurance	4,006	11.88
MP8	Institutions providing health-related services	1,305	3.87
MP5	Provision and administration of public health programmes	1,674	4.96
MP4	Retail sale and other providers of medical goods	205	0.61
MP7	Other industries (rest of the Malaysian economy)	159	0.47
MP2	Nursing and residential care facilities	1	< 0.01
MP9	Rest of world (ROW)	1	< 0.01
Total		33,731	100.00

Source: MNHA Health Expenditure Report 1997-2019 (MNHA, 2021)

Meanwhile, the government has formulated a new direction, including the Strategic Framework of the Medical Programme 2021-2025, streamlined with the principles and ideology of the main strategies of the Ministry of Health Malaysia (Division, 2020). The Ministry of Health has identified seven (7) main strategies, which are S1: strengthen health care service deliveries in hospitals, S2: optimise resource management including facility, equipment, and financing, S3: enhance capacity and capability of human resource health; S4: strengthen governance and stewardship of health care system, S5: strengthen safety and quality in the delivery of health care system, S6: leverage the use of information technology to improve efficiency, and S7: promote safe and quality practices of traditional and complementary medicine.

Inadequate facilities, mismatch of resources across different levels of health care services, and unsustainable health care financing present challenges to the delivery of health care services in Malaysia. These issues have prompted the government to propose focusing on selected targets identified in Chapter 4: Enhancing Defence, Security, Well-being, and Unity (Economic Planning Unit, 2021). Those are:

- Doctor to population ratio is 1:400.
- The hospital beds to population ratio are 2.06:1000.
- Health Index in Malaysian Wellbeing Index (MyWI) is 114.1
- Reduction in the risk of premature mortality is 2 per cent
- The reduction in the prevalence of smoking is 6.3%

Numerous strategies have affected human resources for health (HRH), such as improving human resources for well-being to guarantee an adequate stock of equipped and talented medical care staff and improving the management of such personnel to ensure the societies receive the maximum benefits (Planning Division, 2020b). They ought to be tended to by all parties through an assessment of future prerequisites, maintenance plans that incorporate advantages or maintenance bundles, expanded training openings, and systems administration (Medical Development Division, 2020). According to the performance of the Eleventh Malaysia Plan, the health care services delivered low performance as reflected by the targets for the doctor-to-population ratio, one doctor to 400 persons, which remain unmet (Economic Planning Unit, 2021). As presented in Figure 1.3, although the

number of medical doctors in Malaysia has increased yearly, there is still a shortage to fulfil the hospitals' demands to supply medical doctors.

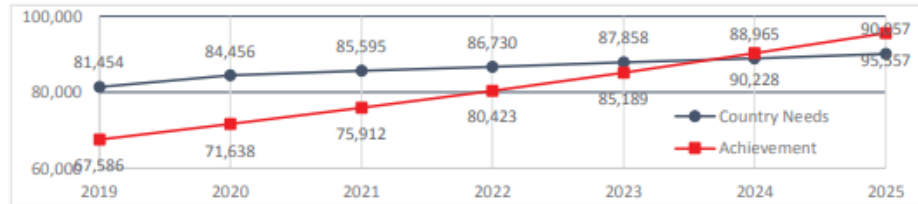


Figure 1.3 Current Demands and Supply of Medical Officers with Projection using Ratio of 1:400 to Populations

Source: Annual Report Ministry of Health Malaysia 2020 (MOH, 2020)

Malaysian Medical Council (MMC) was created by an Act of Parliament on the 27th of September 1971 and gazetted on the 30th of September 1971 to provide the country with secure and competent health care service (Malaysian Medical Council, 2016). The motto was introduced many years ago with the tagline "Protecting patients and guiding doctors." The overall mission was to guarantee the best expectations of medical morals, training, and practice in light of a legitimate concern for patients, general society, and the calling through the reasonable and compelling organisation of the Medical Act 1971 (Malaysian Medical Council, 2016).

MMC jurisdictions are responsible for determining a practitioner's ability to practise safely and competently based on his or her mental or physical health. Council established Fitness to Practise (FTP) Committee in May 2013 to streamline the management of the growing number of practitioners referred to MMC with

medical illnesses and competence concerns. The Fitness to Practice Committee may refer cases to Medical Review Panel (MRP) for review if Fitness to Practice Committee believes they should be reviewed. As a summary of the preceding discussion, medical doctors are the operating core of healthcare organisations. Chen et al. (2013), Li (2020), and Blinkenberg, Pahlavanyali, Hetlevik, Sandvik, and Hunskaar(2020) stated that medical doctors are also referred to as "gatekeepers," as well as they must be fit to perform effectively and offer quality assistance to their patients.

1.3 Global Scenario of Medical Doctors' Health Status

Medical doctors have been dissatisfied with their jobs for the last two decades due to feelings of overwork and lack of support at work (Dhingra & Dhingra, 2021; Lambert, Smith, & Goldacre, 2018). The "unhappy doctors" epidemic has wreaked havoc on medical history in developing countries and across the globe (Scheepers, Emke, Epstein, & Lombarts, 2020). The medical care system has gone through significant changes since the COVID-19 pandemic wreaked chaos worldwide because of the restructuring of resources, cessation of elective activity, the requirement for extra protection, command and control structure and risk of infection to medical doctors (Cubitt, Im, Scott, Jeynes, & Molyneux, 2021). Thus, these medical doctors face many obstacles, including an inability to interact openly with patients, changes in workload, changes in job functions, and lower tolerance resulting in distress reactions among the medical doctors (Rolin, Flis, & Davis, 2021).

Moreover, developed countries, such as the United States of America (US) and the United Kingdom (UK), have seen significant changes in the medical arena, including a decrease in medical autonomy and an increase in accountability. Thus, the implications have led to health impairment (Cubitt et al., 2021; Hewitt et al., 2021; Rolin et al., 2021). The pressure has risen in many countries affecting medical doctors' health status resulting in chronic diseases, such as job burnout, depression, anxiety, and chronic diseases (Nituica et al., 2021). In 1997, a study of medical doctors revealed that they suffered from mental and physical health problems due to prolonged stress and job burnout (Spickard, Gabbe, & Christensen, 2002). Over time, the outbreak of the COVID-19 pandemic hit most medical doctors worldwide, where their psychological distress level rose by almost 93.8 per cent and their poor well-being by 58.9 per cent (De Sio et al., 2020). The results align with a study by Creese et al. (2021) in which medical doctors declined in their well-being due to anxiety, emotional exhaustion, guilt, isolation, and poor support. Vijendren, Yung, and Sanchez (2015) reported that medical doctors in the UK suffered from several types of occupational illnesses, especially mental health disorders. Their study revealed that 59 per cent of participants experienced a musculoskeletal problem, constituting 28 per cent of the total cases.

Besides that, Howe (2013) added that in South Africa, 27 per cent of their medical doctors experienced moderate depression, and 3 per cent were identified with severe depression. Workload and working conditions were ranked as the most important contributing factors to job burnout. In contrast, in Nigeria, 50 per cent of their residency doctors reported that their life was stressful and led them to unhealthy

health behaviours, such as alcohol, cigarette, drugs, and medications, to handle stress. Apart from that, 31 per cent admitted that they have emotional illnesses. Furthermore, more than two-thirds of Australian junior doctors have experienced high-stress levels at the workplace. On average, 54 per cent of participants were at risk of secondary trauma or compassion fatigue, and 69 per cent were at risk of job burnout. Using a sample of medical doctors from Hong Kong, Siu et al. (2012) elucidated that medical doctors were unaware of changes in their health performance due to chronic prolonged stress that caused job burnout. Overall, 31.4 per cent of these medical doctors suffered from job burnout. The number was much higher than in the United States and New Zealand, where healthcare professionals suffered from stress, with only 10 per cent and 28 per cent, respectively. It was recorded that American surgeons had been examined in an extensive national survey. At least 9 per cent of them had made a significant medical error due to the exposure to job burnout and depression (Shanafelt, Balch, Bechamps, & Russell, 2009).

A longitudinal study by McManus, Winder, and Gordon (2002) declared that work-related stress was common among UK medical doctors. Their findings revealed that 331 medical doctors suffered from job burnout resulting from work-related stress. On top of that, 12-year longitudinal research of medical alumni in the United Kingdom discovered that personality differences affected doctors' level of job burnout (McManus, Keeling, & Paice, 2004). Medical doctors with more excellent neuroticism scores were likely to experience a more significant level of severe weariness, and extroverts stated that they had more personal accomplishments with their jobs. A study carried out between 2004 and 2007 among medical doctors in

Switzerland demonstrated that job burnout scores increased from 33 per cent to 42 per cent among general practitioners and from 19 per cent to 34 per cent among paediatricians (Arigoni, Bovier, & Sappino, 2010). Healthcare professionals in Hungary also had difficulties in the work environment. They were at high risk of health impairment in job burnout that might result in an unbearable stress load, which in turn, affected their mental and health in the long run (Adam, Mohos, Kalabay, & Torzsa, 2018; Bekesi et al., 2021; Cseh, Zorga, Sipos, Financz, & Csima, 2021). The findings indicated that healthcare professionals' health impairment significantly affected their work-related chronic stress, especially during the COVID-19 pandemic, compared to other professions (Babicki, Szewczykowska, & Mastalerz-Migas, 2021).

1.4 Preliminary Study

The preliminary study was conducted to validate the problem statement and support the research objectives. This study gathered evidence from seven medical doctors from different hospitals and departments working in Peninsular Malaysia's public hospitals. The preliminary study aimed to obtain some understanding of the well-being status of medical doctors working in public hospitals in Malaysia.

The preliminary study was done from January 2020 until February 2020. Seven medical doctors volunteered to participate in the preliminary study, and they were from four-position grades, namely, those with UD41 (two respondents), UD44 (two respondents), UD48 (two respondents), and UD52 (one respondent). The interview was conducted one-to-one to maintain the confidentiality of the

information provided. There were seven open-ended questions used in the preliminary study. The responses from each of the medical doctors are provided in Appendix D.

1.4.1 Findings of the Preliminary Study

The preliminary study aimed to provide insightful information to the researcher regarding understanding the relevant issues related to medical doctors in Malaysian public hospitals. The preliminary study's findings help establish the main concern and determine if relevant resources are available to develop a problem statement.

Based on the interview sessions with seven medical doctors, the study warrants the entire controversy about the chosen topic. Medical doctors play essential roles in hospitals in delivering service and treating patients. Thus, medical doctors are exposed to severe stress in the workplace. The findings have found that the working environment influences medical doctors' well-being, specifically their mental health and physical health. All medical doctors agreed that they ought to be fit and strong to perform their hectic job, such as treating patients and making decisions about a patient's life. Indirectly, their job is crucial in delivering the best service for the public. Besides, personality differences play a role in their well-being too. This can be seen in some medical doctors who experience stress but manage to cope, while some of them cannot handle their stress effectively.

The preliminary study findings discovered that medical doctors experienced prolonged stress, also known as job burnout. Primarily, medical doctors are often emotionally exhausted and experienced physical fatigue. According to them, job burnout is a common disorder among medical doctors in Malaysian public hospitals. This cannot be avoided as they have to serve several patients daily, do administration work, and experience a lack of support system. Findings have shown that medical doctors burned out, affecting their mental health and physical health. They feel depressed and always scared to go to work and face the work environment. The findings concluded that physical problems occurred due to prolonged stress, such as heavy smoking, sleeping disturbance, and skipping meals.

Thus, it can be surmised that medical doctors working in public hospitals experience work-related demands affecting their mental health and physical health in the long run due to prolonged stress, also known as job burnout.

1.5 Problem Statement

Malaysia's healthcare industry has been harmed by internal issues, such as a physician shortage (Dousin, Collins, & Kler, 2019). An increasing number of patients seeking treatment at public clinics and hospitals has increased the workload for medical doctors, particularly junior doctors who have already endured significant emotional distress. A report from Jabatan Audit Negara (2019) revealed a significant result based on the Auditor General of Malaysia, Yang Berbahagia Datuk Nik Azman Nik Abdul Majid stating that hospital workload is inevitable due to an increase in non-communicable diseases related to mental health problems. The

National Health Morbidity Survey 2015 revealed that 29.2 per cent of Malaysian adults have various mental health disorders. This means 3 in every ten adult Malaysians (About 9.6 million) may have mental health problems, and at least 2 million adults with serious mental illnesses. To date, the national prevalence of depression is 2.3 per cent of the total population in Malaysia (Medical Development Division, 2020; Allied Health Sciences Division, 2020). He added that various initiatives had been taken to address this issue; however, these initiatives will reach saturation levels (Aliman, 2019; Jabatan Audit Negara, 2019; Tawie, 2020). Aliman (2019) reported that public hospitals experience insufficient funding to provide adequate healthcare services in response to the audit findings. Tawie (2020) remarked that the shortage of medical doctors at public hospitals in Malaysia occurs due to the unequal distribution of medical doctors. In Malaysia, there are limited numbers of psychiatrists among medical doctors capable of carrying out large numbers of conducting mental illness cases. As of 2018, there were only 410 psychiatrists available to cater to approximately 32 million population. Thus, the Ministry of Health has been advised to implement requirement mapping staff to cater social needs of people with mental illnesses (Beckstein, Rathakrishnan, Hutchings, & Mohamed, 2020).

Research has shown that the prevalence of mental and physical health problems is high in Malaysian healthcare services, especially during the COVID-19 pandemic (Chow, Francis, Ng, Naim, & Beh, 2021; Woon & Tiong, 2020). There was substantial evidence demonstrating that Malaysian medical doctors were bound to encounter pressure, like gloom, nervousness, substance misuse, addiction, and an

undeniable degree of trouble due to some personality differences (Roslan, Yusoff, Razak, Morgan, & Shauki, 2021). Medical doctors who are exposed to these risks jeopardize their satisfaction and the consideration they give to their patients. Consequently, their ailments and sufferings could bring about a deferral in care conveyance, affecting their patients (Alrawashdeh, Al-Tammemi, Alzawahreh, & Al-Tamimi, 2021).

Additionally, there was evidence that medical doctors' workplace risks resulted in decreased job performances and absenteeism regardless of the non-pandemic or pandemic settings (Carolan, Harris, & Cavanagh, 2017; Chow, Francis, Ng, Naim, et al., 2021). During the COVID-19 pandemic, a study has depicted that various risk factors have been associated with numerous occupational hazards that increase prolonged stress, such as job burnout, depression, and anxiety, and potentially affect physical health problems (Alrawashdeh et al., 2021; Chow, Francis, Ng, Naim, et al., 2021). These were caused by the increasing pressure of overloaded work and a lack of support from supervisors, colleagues, and subordinates, creating a tense work environment.

Tan Sri Dato' Seri Haji Mohd Ismail Merican, a former Director-General of Health, proposed that medical doctors should be genuinely and intellectually fit to perform well in their parts as care suppliers to their patients (Merican, 2010). According to the statistics reported in the annual report of the Malaysian Medical Council (Malaysian Medical Council, 2013), 18,360 registered medical doctors were associated with mental illness (274 cases) and physical illnesses (33 cases) (see Tables 1.4 and 1.5). Dr. Milton Lum, a former President of the Malaysian Medical

Association, suggests that at least five or more mental illness cases were referred monthly to Malaysian Medical Council due to work conditions, especially among junior doctors.

Table 1.3

List of Mental Illnesses among Medical Doctors 2013

Diagnosis	Total Case
Major depressive disorder	110
Acute Stress Reaction	3
Schizophrenia	17
Post-traumatic disorder	8
Depression	11
Adjustment disorder	50
Bipolar disorder	27
Others	48
Total	274

Table 1.4

List of Physical Illnesses among Medical Doctors 2013

Diagnosis	Total Case
Cholesteatoma	1
Allergic Rhinitis	1
Gout	1
Hodgkin's Lymphoma	3
Bronchial Asthma	3
Chronic Hepatitis B	1
Hypothyroidism	2
Others	21
Total	33

Source: Malaysian Medical Council Annual Report 2013 (Malaysian Medical Council, 2013)

Studies in Malaysia have shown that the prevalence of depression and anxiety fell within the global data ranging from 8.7 per cent to 44.6 per cent and 5.3 per cent to 50.6 per cent, respectively (Chow, Francis, Ng, Naim, et al., 2021; Ismail, Lee, Tanjung, Jelani, & Latiff, 2021). Chow et al. (2021) reported that 29.5 per cent of the healthcare workers, especially medical doctors working in Kuala Lumpur government hospital, demonstrated depressive symptoms, while 36.5 per cent of the medical doctors displayed anxiety symptoms. Also, a multi-centre study by Ismail et al. (2021) has shown depression and anxiety symptoms among 431 healthcare professionals working in government hospitals. The prevalence of depression and anxiety symptoms was 26.2 per cent and 39.9 per cent, respectively. The midst of COVID-19 pandemic potentially increases the burden on all medical doctors, causing psychological distress and physical fatigue. Fauzi et al.(2020) also highlighted that most COVID-19 cases were handled by the Ministry of Health public hospitals, district health offices, and health clinics. The increasing heavy workloads of new cases daily are often associated with high-intensity and time-pressured working patterns. Thus, the majority of 1050 medical doctors demonstrated 31 per cent of depressive symptoms, while 29.7 per cent of medical doctors working in the Selangor government associated anxiety symptoms. Another study examining the impact of the COVID-19 pandemic on Malaysian healthcare professionals found that the majority had psychological distress, such as depression, that had led them to suicidal behaviour (Sahimi et al., 2021).

However, data from the Department of Statistics and the National Health and Morbidity Survey indicated that the commonness of hypertension and other cardiovascular infections was not revealed between 1986 and 2015 (Ministry of

Health, 2016). Kinman and Teoh (2018) argued that medical doctors are hesitant to disclose their health problems due to concerns about confidentiality. Within Malaysia's healthcare system, research on medical doctors' health status in public hospitals has been sparse. It supported that medical doctors are reluctant to reveal their health problems concerning the issue of confidentiality (Chow, Francis, Ng, Naim, et al., 2021; Fauzi et al., 2020; Lua & Imilia, 2011).

Numerous studies in the Malaysian context have been found focusing on the area of job satisfaction and turnover among medical doctors in Malaysia (Chew, Ramli, Omar, & Ismail, 2013; Omar, Muda, & Amin, 2009; Ramlan, Rugayah, & Zarul Zafuan, 2014; Roslan, Noor Hazilah, Nor Filzatun, & Azahadi, 2014; Sararaks & Jamaluddin, 1997). According to the Malaysian medical and health service, a lack of medical doctors in the public area and an increasing number of patients looking for therapy at government facilities and medical clinics have expanded the responsibility of medical doctors, especially junior ones (Rajaendram, 2017).

It has been accounted that junior doctors working under excessive pressure looked for mental help (Free Malaysia Today, 2018). A medical doctor in public hospitals leaves and is moved to private medical clinics; at least 124 specialist doctors resigned in 2015, while 128 specialist doctors left in 2016 (Fong, 2016).

In May 2013, Malaysian Medical Council (MMC) issued a new rule and regulation establishing the Fitness to Practise (FTP) Committee to determine a medical doctor's ability to practise safely and competently based on his or her mental or physical health. The committee will determine whether the medical doctor is fit to practice or refer to Medical Review Panel (MRP) when deemed necessary. MMC has

the jurisdiction to ascertain a medical doctor's ability to practice safely and competently based on his or her mental or physical health. MRP cases increased in 2019 with 209 cases involved from 192 cases in 2018 due to the increasing number of medical doctors involved in medical-related problems under their supervision, such as mental illness and physical complaints that prohibit them from becoming fit as employees of the public hospitals (Majlis Perubatan Malaysia, 2019).

In particular, professional health shortages severely constrained Malaysia's healthcare system and public sector. This situation is similar in several South-East Asian countries (Kanchanachitra et al., 2011; Rajaendram, 2017). Malaysia has 0.9 medical doctors per 1,000 population compared to 2.2 in 15 upper-middle-income countries worldwide (WHO, 2013). Malaysia has fewer medical doctors than the Philippines, but more than Thailand, according to the World Health Organization's Malaysia Health System Review: Health System in Transition Report (WHO, 2013). Human Resources for Health's (HRH) density for medical doctors in Malaysia is relatively low compared to other developed countries. For example, the United Kingdom (UK), Germany, Australia, the United States, Canada, and other Asian developed countries, such as Singapore and the Republic of Korea (Planning Division, 2016). For instance, the number of nurses keeps growing; in contrast, the number of medical doctors, pharmacists, and dental practitioners remains unchanged with the comparison of population growth that has increased rapidly for a decade. Compared to Organization for Economic Co-operation and Development (OECD) countries, Malaysia's ratio of medical doctors and nurses to the population in Malaysia is considered low (World Health Organization, 2014). Furthermore, the workload of clinical tasks, teaching, and supervising the junior doctors have led the

senior doctors to leave the public healthcare sector and enter the private healthcare sector. Consequently, the remaining senior medical doctors have to carry a high degree of workload due to the shortage of medical doctors, hence, leading to job stress among them.

Tan Sri Dato Seri Dr. Hj Mohd Ismail Merican, a former Director-General of Health Malaysia, informed healthcare employees during his speeches that investment in human resources for health (HRH) remains an imperative component of the healthcare system (Merican et al., 2010). In 2009, it was anticipated that the doctor-population ratio would improve from 1:927 to 1:597 by 2015 (Department of Statistics, 2016). National Health and Morbidity Survey 2019 displayed that the current update of the doctor population ratio for 2019 is 1:454, while WHO recommended a ratio of 1:400 in 2016 in the Health Workforce Requirement for Universal Health Coverage and Sustainable Development Goals Report (Ministry of Health Malaysia, 2019).

Apart from that, one Member of Parliament, Dr. Kelcin Yii Lee Wuen, remarked that the Ministry of Health Malaysia should consider the shortage of medical doctors that leads to job burnout (Aliman, 2019; Tawie, 2020). According to *Laporan Ketua Audit Negara mengenai Aktiviti Kementerian/Jabatan Kerajaan Persekutuan dan Badan-Badan Berkanun Persekutuan Siri 1*, several departments in Malaysian public hospitals revealed that the shortage of healthcare professionals, specifically medical doctors and specialists has increased from 11.6 per cent to 53.1 per cent (Jabatan Audit Negara Malaysia, 2018). This resulted in available medical doctors working long hours to handle the greater workload. Therefore, some medical

doctors have been diagnosed with chronic stress, such as job burnout (Kinman & Teoh, 2018; Merican, 2010).

The preceding discussion indicates that the Malaysian government continuously strives to combat the concern of health status among medical doctors serving at public hospitals due to workforce issues and establish preventive strategies and effective programmes in managing the community's mental well-being. One of the strategies was done on the 24th of Mac 2016 when the Malaysia Psychiatric Association announced the launch of Depression Awareness Day to seek awareness of depression among public members.

Given the evidence introduced above, it seems sensible to recommend that there is a need to improve the nature of the medical services of experts, especially medical doctors, to offer great assistance to patients. Furthermore, patient care has long been regarded as a crucial component of healthcare. Since the last decade, healthcare quality has been an imperative objective (Brickell & McLean, 2011). Healthcare professionals, primarily medical doctors, are pertinent in providing high-quality medical care to their patients based on their needs, wants and preferences (Firth-Cozens, 2001).

1.6 Research Questions

This study attempts to answer the following research questions:

1. Do job demands variables (role conflict, role overload, role ambiguity, neuroticism, and emotional dissonance) have a direct

relationship with job burnout among medical doctors in Malaysian public hospitals?

2. Do job resources variables (supervisor support, peer support, subordinate support, extraversion, and internal locus of control) have a direct relationship with job burnout among medical doctors in Malaysian public hospitals?
3. Does job burnout have a direct relationship with health status (mental health and physical health) among medical doctors in Malaysian public hospitals?
4. Does job burnout mediate the relationship between job demands variables (role conflict, role overload, role ambiguity, neuroticism, and emotional dissonance) and health status (mental health and physical health) among medical doctors in Malaysian public hospitals?
5. Does job burnout mediate the relationship between job resources variables (supervisor support, peer support, subordinate support, extraversion, and internal locus of control) and health status (mental health and physical health) among medical doctors in Malaysian public hospitals?

1.7 Research Objectives

Specifically, the objectives of this study are:

1. To investigate the direct relationship between job demands variables (role conflict, role overload, role ambiguity, neuroticism, and emotional dissonance) and job burnout among medical doctors in Malaysian public hospitals
2. To investigate the direct relationship between job resources variables (supervisor support, peer support, subordinate support, extraversion, and internal locus of control) and job burnout among medical doctors in Malaysian public hospitals
3. To investigate the direct relationship between job burnout and health status (mental health and physical health) among medical doctors in Malaysian public hospitals
4. To investigate the indirect relationship between job demands variables (role conflict, role overload, role ambiguity, neuroticism, and emotional dissonance) and health status (mental health and physical health) via job burnout among medical doctors in Malaysian public hospitals
5. To investigate the indirect relationship between job resources variables (supervisor support, peer support, subordinate support, extraversion, and internal locus of control) and health status (mental health and physical health) via job burnout among medical doctors in Malaysian public hospitals

1.8 The Significance of the Study

This study desires to give huge hypothetical and useful commitments to the job demands-resources model, job burnout, and health status (mental health and physical health) within the context of the Malaysian public healthcare sector.

1.8.1 Theoretical Contribution

The researcher hopes to contribute to a greater understanding of the factors affecting health status (mental and physical health) at the individual level of analysis. Previously, studies have shown the outcomes of employee performance issues on happiness, job satisfaction, turnover, and general health. Specifically, this study adds to the existing body of knowledge about healthcare by focusing on multiple dimensions of health status, such as mental health issues, depression and anxiety, physical health issues, and somatic complaints. The present research focuses on both areas of the health domain and the niche area of study to gain a prominent understanding of health outcomes in the workplace (Danna & Griffin, 1999; Mudrak et al., 2017; Page & Vella-Brodrick, 2009). Some of the variables have been studied on the organisational level (social support, workplace spirituality, authentic leadership, work resources, work-family conflicts, nature-based therapy), job level (work demands, job insecurity, work-related psychosocial hazards), and personal level (religious coping, emotional intelligence, medical error, long working hours, coping strategies, self-efficacy). However, this present study is different from the previous one as it incorporates many possible working conditions and focuses on both negative and positive indicators such as job demands variables (role conflict,